CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

CEASE AND DESIST ORDER NO. R5-2007-XXXX

REQUIRING THE CITY OF COLFAX
WASTEWATER TREATMENT PLANT
PLACER COUNTY
TO CEASE AND DESIST
FROM DISCHARGING CONTRARY TO REQUIREMENTS

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Regional Water Board) finds that:

1. On XX ~~June~~ October 2007 the Regional Water Board adopted Waste Discharge Requirements (WDR) Order No. R5-2007-XXXX (NPDES Permit No. CA0079529) prescribing waste discharge requirements for the City of Colfax (hereafter Discharger), Wastewater Treatment Plant (hereafter Facility), Placer County.

2. WDR Order No. R5-2007-XXXX contains Effluent Limitation A.1.j. which reads as follows:

   "j. Average Daily Dry Weather Flow. The Average Daily Dry Weather Discharge Flow shall not exceed 0.2 mgd."

3. WDR Order No. R5-2007-XXXX contains Effluent Limitation A.2.j. for discharges from the new wastewater treatment plant, effective 1 January 2009, which reads as follows:

   "*j. Average Daily Dry Weather Flow. The Average Daily Dry Weather Discharge Flow shall not exceed 0.275 mgd.*"

4. The Discharger owns and operates a sewage collection system and wastewater treatment plant, and provides sewerage service to the City of Colfax. The sewage collection system experiences excessive rain-induced infiltration and inflow (I/I), causing high flows to the wastewater treatment facility during winter periods. 40 CFR Section 35.2005(b)(29) defines "Nonexcessive inflow" as the maximum total flow rate during storm events which does not result in chronic operational problems related to hydraulic overloading of the treatment works or which does not result in a total flow of more than 275 gallons per capita per day (domestic base flow plus infiltration plus inflow). Chronic operational problems may include surcharging, backups, bypasses, and overflows. At the Colfax facility, excess flows are stored in the treatment ponds and a 69 million gallon storage reservoir, and then are treated and discharged to surface waters throughout the year. Although the average daily dry weather flow (ADDWF) is currently 0.2 mgd, and the future ADDWF is 0.275 mgd, the Discharger has reported that it needs to discharge 0.5 mgd of treated effluent year-round in order to process all the excess I/I received at the plant over each winter period. The increased discharge flows exceed the flow authorized to be discharged by Order No. R5-2007-XXXX. Some I/I is expected in any collection system, and many facilities must discharge increased flows above the ADDWF

for short periods following significant wet weather events. These short duration peak flows are authorized discharges, as long as they remain within an appropriate peak wet weather design flow and there are no violations of other permit requirements. However, the amount of infiltration and inflow into the Colfax collection system is excessive, causing the Discharger to increase the overall capacity of the wastewater treatment facility, and construct and operate a 69 million gallon storage reservoir that has been subject to concerns regarding seepage, as discussed in Finding 6, below.

5. It is not reasonable to establish effluent flow limitations significantly higher than the average daily design flow, based on the fact that significant I/I exists, and not take actions to reduce the I/I. The Discharger completed an I/I study in 2005 that identified projects needing to be completed to correct some problem areas that significantly contribute to the I/I. The Discharger indicated that it has an annual budget of approximately $90,000 to conduct repairs, however progress to implement corrective measures to date has been minimal.

6. The wastewater treatment plant includes a storage reservoir to hold excess treated or partially treated flows. The storage reservoir is unlined and has approximately 69,000,000 gallons of storage capacity. It consists of dam/levee on the downstream side of the reservoir. The dam has a spillway, approximately 4 feet below the top of dam, to prevent overtopping and damage to the dam. The storage reservoir is unlined and constructed over bedrock in an area of several natural springs. Seepage from the reservoir has occurred since its initial use in 1979 and the seepage flow is a function of the amount of water stored in the reservoir. The facility previously discharged treated domestic wastewater and storm water to land and treated seepage wastewater from the storage reservoir to an unnamed tributary to Smuthers Ravine, a water of the United States. However, due to concerns over pathogens and/or chlorine in the seepage discharges, the Discharger modified its treatment system and proposed to place a liner in the storage reservoir to prevent further wastewater seepage. The facility now treats domestic wastewater and collected seepage from the storage reservoir in an interim tertiary treatment system and discharges all the effluent to the unnamed tributary to Smuthers Ravine. The Discharger has not yet dewatered the storage reservoir for installation of a liner. Installation of a liner will not prevent further groundwater seepage under the liner, but it would prevent further wastewater seepage, allowing the Discharger to cease treatment of seepage flows, and providing a significant reduction in discharge flows to the receiving water. Alternatively, if adequate I/I reductions were made, there could be sufficient reductions in peak flow discharges to the facility such that the storage reservoir might no longer be necessary.

7. WDR Order No. R5-2007-XXXX contains Discharge Prohibition A which reads as follows:

   "A. Discharge of wastewater at a location or in a manner different from that described in the Findings is prohibited."

8. Although the discharger currently captures seepage at the base of the dam and returns it to the storage reservoir, it is possible that wastewater seepage bypasses this collection system or occurs at other locations and discharges to surface water in violation of

Discharge Prohibition A. Therefore, the Discharger violates or threatens to violate Discharge Prohibition A, of WDR Order No. R5-2007-XXXX.

9. The Regional Water Board adopted Cease and Desist Order (CDO) No. 5-01-181 on 14 June 2001 to require the Discharger to comply with requirements of Waste Discharge Requirements Order No. 5-01-180 due to discharges of wastewater over the spillway of the storage reservoir, and problems with the seepage disinfection system in place at that time. These problems have been corrected, and CDO No. 5-01-181 is no longer necessary.

10. WDR Order No. R5-2007-XXXX contains Effluent Limitations A.1.a. and A.2.a., which read, in part, as follows

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Nitrate Nitrogen, Total (as N)[1]	mg/L	10	--	--	--	--

11. In accordance with CWC section 13385(j)(3), the Regional Water Board finds that the Discharger is not able to consistently comply with the new effluent limitation for nitrate. These limitations are new requirements that become applicable to the Order after the effective date of adoption of the waste discharge requirements, and after 1 July 2000, for which new or modified control measures are necessary in order to comply with the limitation, and the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.

12. CWC section 13385(h) and (i) require the Regional Water Board to impose mandatory minimum penalties upon dischargers that violate certain effluent limitations. CWC section 13385(j) exempts certain violations from the mandatory minimum penalties. CWC section 13385(j)(3) exempts the discharge from mandatory minimum penalties "*where the waste discharge is in compliance with either a cease and desist order issued pursuant to Section 13301 or a time schedule order issued pursuant to Section 13300, if all the [specified] requirements are met.*"

13. Compliance with this Order exempts the Discharger from mandatory penalties for violations of effluent limitations for nitrate, in accordance with CWC section 13385(j)(3). CWC section 13385(j)(3) requires the Discharger to prepare and implement a pollution prevention plan pursuant to section 13263.3 of the California Water Code. Therefore, a pollution prevention plan will be necessary for nitrate in order to effectively reduce the effluent concentrations by source control measures.

14. Since the time schedules for completion of actions necessary to bring the waste discharge into compliance exceeds 1 year, this Order includes interim requirements and dates for their achievement. The time schedules do not exceed 5 years.

15. The compliance time schedule in this Order includes an interim effluent limitation for nitrate. Interim effluent limitations typically consist of a maximum daily effluent concentration derived using sample data provided by the Discharger. In developing the interim limitations, when there are ten sampling data points or more, sampling and laboratory variability is accounted for by establishing interim limits that are based on normally distributed data where 99.9% of the data points will lie within 3.3 standard deviations of the mean (*Basic Statistical Methods for Engineers and Scientists, Kennedy and Neville, Harper and Row*). When there are less than ten sampling data points available, the *Technical Support Document for Water Quality- Based Toxics Control* ((EPA/505/2-90-001), TSD) recommends a coefficient of variation of 0.6 be utilized as representative of wastewater effluent sampling. The TSD recognizes that a minimum of ten data points is necessary to conduct a valid statistical analysis. The multipliers contained in Table 5-2 of the TSD are used to determine a maximum daily limitation based on a long-term average objective. In this case, the long-term average objective is to maintain, at a minimum, the current plant performance level. Thus, when there are less than ten sampling points for a constituent, interim limitations are based on 3.11 times the maximum observed effluent concentration to obtain the daily maximum interim limitation (TSD, Table 5-2). For this facility there is a lack of effluent data for nitrate representing when the Facility is nitrifying to the maximum extent practicable in compliance with special provision VI.C.4.a. However, effluent data from November 2002 through April 2007 were available for ammonia. Therefore, effluent nitrate concentrations were estimated and used to calculate interim effluent limitations for nitrate, assuming that complete nitrification was occurring in the interim treatment system (i.e., all ammonia is converted to nitrate). The converted ammonia concentrations were then added to the actual nitrate concentrations to derive the total estimated nitrate concentration in the effluent. In the absence of an actual nitrate concentration, the average of all the available nitrate values (0.70 mg/L) was used as a default nitrate concentration. Interim effluent limitations for nitrate were then established using the resulting data set and the procedures described above.

16. The Regional Water Board finds that the Discharger can undertake source control and treatment plant measures to maintain compliance with the interim limitations included in this Order. Interim limitations are established when compliance with the final effluent limitations cannot be achieved by the existing discharge. Discharge of constituents in concentrations in excess of the final effluent limitations, but in compliance with the interim effluent limitations, can significantly degrade water quality and adversely affect the beneficial uses of the receiving stream on a long-term basis. The interim limitations, however, establish an enforceable ceiling concentration until compliance with the effluent limitation can be achieved.

~~20.~~17. Section 13301 of the California Water Code (CWC) states in part, "*When a regional board finds that a discharge of waste is taking place or threatening to take place in violation of requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventative action. In the*

event of an existing or threatened violation of waste discharge requirements in the operation of a community sewer system, cease and desist orders may restrict or prohibit the volume, type, or concentration of waste that might be added to such system by dischargers who did not discharge into the system prior to the issuance of the cease and desist order. Cease and desist orders may be issued directly by a board, after notice and hearing, or in accordance with the procedure set forth in Section 13302."

~~21.~~18. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, *et seq*.), in accordance with Section 15321(a)(2), Title 14, California Code of Regulations (CCR). In addition, this Order is not subject to CEQA because it does not involve the discharge of hazardous materials and because this order does not have the potential to cause a significant impact on the environment (Title 14 CCR section 15061(b)(3)). The City of Colfax certified a Final Environmental Impact Report (FEIR) (dated 1 October 2004), which evaluated the lining of Pond 3 (Storage Reservoir). The FEIR has an extensive discussion regarding draining and testing of the liner and discusses the design life of the liner. The Regional Board has reviewed the FEIR.

~~22.~~19. On XX ~~June~~October, 2007, in Sacramento, California, after due notice to the Discharger and all other affected persons, the Regional Water Board conducted a public hearing at which evidence was received to consider a Cease and Desist Order under CWC section 13301 to establish a time schedule to achieve compliance with waste discharge requirements.

~~23.~~20. Any person adversely affected by this action of the Regional Water Board may petition the State Water Resources Control Board to review this action. The petition must be received by the State Water Resources Control Board, Office of the Chief Counsel, P.O. Box 100, Sacramento, CA 95812-0100, within 30 days of the date on which this action was taken. Copies of the law and regulations applicable to filing petitions will be provided on request.

IT IS HEREBY ORDERED THAT Cease and Desist Order No. 5-01-181 is rescinded, and, pursuant to CWC Section 13301:

1. The Discharger shall comply with the following time schedule to reduce I/I, in order to achieve compliance with Effluent Limitations A.1.j. and A.2.j. in WDR Order No. R5-2007-XXXX as described in the above Findings:

Task	Date Due
Prepare and implement a Capital Improvement Program to provide repairs to the collection system to eliminate excessive I/I as defined by 40 CFR 35.2005(b)(16).	**1 March 2008**
Submit and immediately implement a plan to complete a detailed assessment of the condition of the collection system.	**1 March 2008**
Install and maintain flow monitors at key locations in the collection system to evaluate problem areas and measure progress at reducing I/I	**1 October 2008**
Submit annual reports that summarizes: 1) flow monitoring data; 2) status and results of the condition assessment; 3) Collection system repairs completed; 4) Estimates of I/I reduction achieved; 5) Identifies budget and work to be conducted during the next year	**1 February, each year**
Submit a summary report providing technical documentation regarding overall compliance with Effluent Limitations A.1.j. and A.2.j.	**1 October 2013.**

Following completion of the tasks outlined above, the Regional Water Board will determine if I/I corrections are providing adequate reductions in peak flows, if additional I/I corrections should be completed, or if Effluent Limitations A.1.j. and A.2.j. should be modified to increase allowable flows to surface waters. In the interim, the Discharge shall not exceed a maximum daily discharge flow rate of ~~0.5~~0.65 mgd while the interim plant is operational, and ~~0.65~~0.50 mgd after the new wastewater treatment plant is operational.

2. The Discharger shall comply with the following time schedule to ensure compliance with Discharge Prohibition A in WDR Order No. R5-2007-XXXX as described in the above Findings:

Task	Date Due
Submit workplan and schedule for ceasing wastewater seepage discharges from storage reservoir.	**60 days after adoption of this order**
Submit Progress Reports, including discussion of compliance with workplan and schedule	~~**1 October 2007**~~ **1 January 2008** **1 June 2008**
Full compliance with Discharge Prohibition A	**1 October 2008**

3. The Discharger shall comply with the following time schedule to ensure compliance with the nitrate effluent limitation in WDR Order No R5-2007-XXXX as described in the above Findings:

Task	Date Due
Submit Method of Compliance Workplan/Schedule	**1 January 2008**
Submit Pollution Prevention Plan (PPP)[1] pursuant to CWC Section 13263.3	**1 March 2008**
Full compliance with Effluent Limitations A.1.a., and A.2.a. for Nitrate	**1 January 2009**

[1] The PPP shall be prepared and implemented for nitrate where appropriate, and shall meet the requirements specified in CWC Section 13263.3

4. For the compliance schedules required by this Order, the Discharger shall submit to the Regional Water Board on or before each compliance report due date, the specified document or, if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is being reported, the reasons for such noncompliance shall be stated, and shall include an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Regional Water Board by letter when it returns to compliance with the time schedule.

5. The following interim effluent limitation for nitrate shall be effective immediately, and shall remain in effect through 31 December 2008, or when the Discharger is able to come into compliance with the final effluent limitation, whichever is sooner.

Parameter	Maximum Daily Limitation
Nitrate (as N) (mg/L)	**16.8**

~~5.~~6. If, in the opinion of the Executive Officer, the City of Colfax fails to comply with the provisions of this Order, the Executive Officer may apply to the Attorney General for judicial enforcement or issue a complaint for Administrative Civil Liability.

~~6.~~7. Any person signing a document submitted under this Order shall make the following certification:

> *"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."*

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on XX ~~June~~ October 2007.

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PAMELA C CREEDON, Executive Officer